

Date: March 24, 2010  
W.I.: 1412  
Referred by: Planning Committee

ABSTRACT

Resolution No. 3946

This Resolution approves the “Bay Area Interagency Consultation Procedures for PM<sub>2.5</sub> Hot-Spot Analyses,” listed as Attachment A.

Date: March 24, 2010  
W.I.: 1412  
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Re: Approval of Bay Area Interagency Consultation Procedures for PM<sub>2.5</sub> Hot-Spot Analyses

METROPOLITAN TRANSPORTATION COMMISSION  
RESOLUTION NO. 3946

WHEREAS, the Metropolitan Transportation Commission (MTC) is the regional transportation planning agency for the San Francisco Bay Area pursuant to Government Code § 66500 et seq.; and

WHEREAS, on December 14, 2009 the United States Environmental Protection Agency (EPA) designated the Bay Area as nonattainment for the national 24-hour fine particle (PM<sub>2.5</sub>) standards; and

WHEREAS, under 40 CFR 93.116(a), all Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) non-exempt projects must have a project-level conformity determination; and

WHEREAS, under 40 CFR 93.116(a), a PM<sub>2.5</sub> hot-spot analysis is required only for certain kinds of projects (listed at 40 CFR 93.123(b)(1); in all other cases, a hot-spot analysis is not required; and

WHEREAS, under 40 CFR 93.105, MTC must be involved in the establishment of interagency consultation procedures for project-level conformity determinations; and these procedures must be used in making project-level conformity determinations.

RESOLVED, that the interagency consultation procedures contained in Attachment A to this resolution will be used in making project-level conformity determinations; and, be it further

RESOLVED, that the MTC staff may make minor adjustments, as necessary, to Attachment A to reflect amended or new guidance on PM<sub>2.5</sub> hot-spot analyses and interagency consultation requirements as issued by EPA.

METROPOLITAN TRANSPORTATION COMMISSION

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Scott Haggerty, Chair

The above resolution was entered into by the Metropolitan Transportation Commission at a regular meeting of the Commission held in Oakland, California, on March 24, 2010.

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Attachment A  
Resolution No. 3946  
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## **Bay Area Interagency Consultation Procedures for PM<sub>2.5</sub> Hot-Spot Analyses**

### **General**

Particle pollution is a mixture of microscopic solids and liquid droplets suspended in air. This pollution, also known as particulate matter, is made up of a number of components, including acids (such as nitrates and sulfates), organic chemicals, metals, soil or dust particles, and allergens (such as fragments of pollen or mold spores). Fine particle pollution or PM<sub>2.5</sub> describes particulate matter that is 2.5 micrometers in diameter and smaller.

On December 14, 2009, the Environmental Protection Agency (EPA) designated the nine-county San Francisco Bay Area as nonattainment for the national 24-hour PM<sub>2.5</sub> standards established in 2006. This does not include the eastern portion of Solano County, which falls under the Sacramento PM<sub>2.5</sub> nonattainment area, nor the northern portion of Sonoma County, which is designated as an unclassifiable/attainment area.

Beginning December 14, 2010, sponsors of certain projects that involve significant levels of diesel vehicle traffic are required to complete a PM<sub>2.5</sub> hot-spot analysis for project-level conformity determinations made by the Federal Highway Administration (FHWA) or Federal Transit Administration (FTA).

### **Purpose**

These procedures outline the interagency consultation procedures for PM<sub>2.5</sub> hot-spot analysis for the Bay Area.

The Metropolitan Transportation Commission (MTC) will facilitate interagency consultation for PM<sub>2.5</sub> hot-spot analyses through the Air Quality Conformity Task Force (herein referred to as the Conformity Task Force). The Conformity Task Force is open to all interested agencies, but will include staff from EPA, FHWA, FTA, Caltrans, California Air Resources Board (CARB), Association of Bay Area Governments (ABAG), Bay Area Air Quality Management District (BAAQMD), congestion management agencies (CMAs), and transit operators. MTC will chair the Conformity Task Force. The meetings of the Conformity Task Force are open to the public.

## **Key Elements**

Below is summary information explaining (1) How does PM<sub>2.5</sub> project-level conformity apply for different types of projects?; (2) What is a project of air quality concern?; (3) What is a hot-spot analysis?; and (4) What are the interagency consultation requirements for PM<sub>2.5</sub> hot-spot analyses?

### ***How Does PM<sub>2.5</sub> Project-Level Conformity Apply for Different Types of Projects?***

Exempt projects are those listed in 40 CFR 93.126 and traffic synchronization projects under 40 CFR 93.128. These projects are exempt from project-level conformity, and PM<sub>2.5</sub> project-level conformity determinations are not required.

Projects of air quality concern are those types of projects listed in 40 CFR 93.123(b)(1). PM<sub>2.5</sub> project-level conformity determinations that meet all applicable criteria (see 40 CFR 93.109) are required for these types of projects, and they must include a hot-spot analysis.

Nonexempt projects that are not of local air quality concern would include projects that are not of the type listed in 40 CFR 93.123(b)(1), but are also not exempt. PM<sub>2.5</sub> project-level conformity determinations that meet all applicable criteria (see 40 CFR 93.109) are required for these types of projects, but they do not have to include a hot-spot analysis. The project-level conformity determination should document that the project is not of the type identified in 40 CFR 93.123(b)(1) and EPA has determined that such projects meet the Clean Air Act's requirements without any further hot-spot analysis.

### ***What Is a Project of Air Quality Concern?***

EPA specified in 40 CFR 93.123(b)(1) that projects of air quality concern are certain highway and transit projects that involve significant levels of diesel vehicle traffic, or any other project that is identified in the PM<sub>2.5</sub> State Implementation Plan (SIP) as a localized air quality concern. These projects of air quality concern (POAQC) are defined by 40 CFR 93.123(b)(1) as:

- New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;
- Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location;
- Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>2.5</sub> or PM<sub>10</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

### ***What Is a PM<sub>2.5</sub> Hot-Spot Analysis?***

A hot-spot analysis is defined in 40 CFR 93.101 as an estimation of likely future localized PM<sub>2.5</sub> pollutant concentrations and a comparison of those concentrations to the national ambient air quality standards. It estimates the air quality impacts of a project on a small scale, such as at a congested roadway intersection or a bus terminal, and uses an air quality dispersion model to determine the effects of emissions on air quality. Such an analysis is a means of demonstrating that a transportation project meets Clean Air Act conformity requirements to support state and local air quality goals with respect to potential localized air quality impacts. When a hot-spot analysis is required, it is included within the project-level conformity determination that is made by FHWA or FTA.

### ***What Are the Interagency Consultation Requirements for PM<sub>2.5</sub> Hot-Spot Analyses?***

Interagency consultation is an important tool to completing project-level conformity determinations and hot-spot analyses. Interagency consultation must also be used to evaluate and choose associated methods and assumptions to be used in PM<sub>2.5</sub> hot-spot analyses (40 CFR 93.105(c)(1)(i)). The agencies involved in the interagency consultation process for the Bay Area include the project sponsor, EPA, FHWA, FTA, Caltrans, MTC, and other local transportation and air quality agencies that participate in the Conformity Task Force.

## **Interagency Consultation Procedures**

### ***Roles & Responsibilities***

Each agency has a specific role and responsibility in project-level conformity determinations. The key roles and responsibilities of the project sponsor, federal agencies, MTC, and the Conformity Task Force are described below.

- The *project sponsor* is the agency responsible for implementing the project. Typically, the project sponsor is a local government, transit operator, or Caltrans. The project sponsor is responsible for conducting the PM<sub>2.5</sub> hot-spot analysis and meeting the interagency consultation requirements as described in 40 CFR 93.105 and set forth in these procedures. The project sponsor, in cooperation with federal agencies, is also responsible for conducting the environmental analysis and review to comply with NEPA. It is also the responsibility of the project sponsor to establish a proactive public involvement process that provides opportunity for public review and comment on the PM<sub>2.5</sub> hot-spot analyses. The public review is typically completed as part of the NEPA process.

The *EPA, FHWA and FTA* are responsible for determining the requirements of the transportation conformity are met. FHWA and FTA must make a project-level conformity determination prior to its first action to adopt, accept, approve or fund a non-exempt phase of a project under their agency's purview. In most cases project-level conformity determinations are made as part of the NEPA process, and must be completed prior to adoption of the categorical exclusion (CE), finding of no significant impact (FONSI), or record of decision (ROD). PM<sub>2.5</sub> hot-spot analyses would generally be included in the documents prepared to meet NEPA requirements. It is the responsibility of either FHWA

or FTA to review and approve these NEPA documents for their certain actions. Concurrence action on the methods and assumptions used in the PM<sub>2.5</sub> hot-spot analysis would be needed, at a minimum, by EPA and FHWA or FTA because these agencies ultimately approve the project-level PM<sub>2.5</sub> conformity determinations and hot-spot analyses.

Note that in accordance with Section 6004 of 23 U.S.C. 326 FHWA and Caltrans presently have a Memorandum of Understanding (MOU) to assume responsibility for determining whether a proposed project qualifies as a CE from requirements for environmental assessments or environmental impact statements pursuant to NEPA; those CE activities are listed in the MOU. Under the Section 6004 MOU, Caltrans also assumes responsibility for approving project-level conformity determinations. Unless the Section 6004 MOU is no longer in effect, a concurrence action on the methods and assumptions used in the PM<sub>2.5</sub> hot-spot analysis would also be needed by Caltrans.

- The *MTC* is responsible for the establishment of interagency consultation procedures for project-level conformity determinations. MTC oversees the activities of the Air Quality Conformity Task Force, and will use the meetings of the Conformity Task Force as a forum for interagency consultation on PM<sub>2.5</sub> hot-spot analyses. MTC will provide a means through the Fund Management System (FMS) for project sponsors to submit technical information for review by the Conformity Task Force.
- The *Air Quality Conformity Task Force* is responsible for reviewing the technical information submitted by the project sponsor and making a recommendation as to whether a project meets the definition of a project of air quality concern as identified in 40 CFR 93.123(b)(1). A concurrence action to determine a project as a POAQC must be made by EPA and FHWA or FTA. If a hot-spot analysis is required, the sponsor submits the assumptions, methods and analysis of the PM<sub>2.5</sub> hot-spot analyses to the Conformity Task Force for review. The Conformity Task Force reviews and comments on the hot-spot analysis. As noted above, it is also the responsibility of EPA and FHWA or FTA to concur on the assumptions, methods and analysis used in the PM<sub>2.5</sub> hot-spot analyses. Caltrans must also concur if it approves the project-level conformity determination under the Section 6004 MOU.

### ***Steps for Interagency Consultation***

The interagency consultation process involves the following steps:

1. MTC to Identify the Universe of Projects Subject to Consultation Requirements: MTC is to track projects that will need to undergo consultation through the Fund Management System (FMS), a web-based interface used to manage projects in the Transportation Improvement Program (TIP). MTC staff will use reporting functions in FMS to identify the universe of projects that will need to undergo the consultation process, using the following query parameters:

- *Exempt/Non-Exempt Status:* MTC staff code each project in FMS based on the non-exempt or exempt category in which they fall. The query will capture both non-exempt projects and projects exempt under Section 93.127 (which are exempt from regional emissions analyses, but not exempt from hot-spot requirements).
  - *Federally-Funded or Approved:* FMS includes a project funding breakdown by source. The query will capture projects that have any funding amount identified from a federal source.
  - *Federal Action:* MTC staff will add a field in FMS inquiring whether a project sponsor has secured federal action on all phases of project. The query will capture any project that still needs a federal action.
  - *Project Schedule:* FMS includes project schedule by phases. The query will capture any project that has not yet begun construction.
2. Project Sponsor to Submit Project Information: For projects that fall in the universe of projects subject to consultation, the project sponsor will be required to submit technical information into FMS using the required project assessment form for PM<sub>2.5</sub> interagency consultation (Attachment A-1). The project sponsor is responsible for completing the form in its entirety prior to review by the Conformity Task Force.
  3. Conformity Task Force to Review Projects and Federal Agencies to Make POAQC Determination: MTC staff will distribute the completed form as described in Step 2 to the Conformity Task Force for its review. Materials will be transmitted to the Conformity Task Force in advance of meetings to allow for members to have adequate time to review. The Conformity Task Force is responsible for making a recommendation as to which projects are considered POAQCs. A concurrence action to determine a project as a POAQC must be made by EPA and FHWA, FTA or Caltrans for NEPA-delegated projects.
  4. Project Sponsor of POAQC to Submit Methods/Assumptions and/or PM<sub>2.5</sub> Hot-Spot Analyses for Review by Conformity Task Force: The project sponsor of a project identified as POAQC will upload a summary of their key methods, assumptions, and analysis into FMS. The project sponsor is ultimately responsible for completing the necessary forms and submitting their methods, assumptions, analysis summaries to MTC for review by the Conformity Task Force. In some cases, the project sponsor may submit their PM<sub>2.5</sub> hot-spot analyses, which includes the methods and assumptions, for review by the Conformity Task Force. MTC will facilitate the interagency consultation as part of the regular meetings of the Conformity Task Force. Materials will be transmitted to the Conformity Task Force in advance of meetings to allow for members to have adequate time to review.
  5. Conformity Task Force to Review Methods/Assumptions and/or PM<sub>2.5</sub> Hot-Spot Analyses: The Conformity Task Force is to review and comment on the methods/assumptions, and in some cases the PM<sub>2.5</sub> hot-spot analyses if available, that are



prepared by the project sponsor. Once the consultation has occurred, the project sponsor is responsible for responding to the comments from the Conformity Task Force as they complete the PM<sub>2.5</sub> hot-spot analyses. The approval of the PM<sub>2.5</sub> hot-spot analyses and project-level conformity determination is made by FHWA, FTA or Caltrans for NEPA-delegated projects.

## **Attachment A-1**

### **Project Assessment Form for PM<sub>2.5</sub> Interagency Consultation**

The San Francisco Bay Area is designated as nonattainment for the 24-hour PM<sub>2.5</sub> standard. Beginning December 14, 2010, certain projects are required to engage in interagency consultation and complete PM<sub>2.5</sub> hot-spot analysis as part of the project-level conformity determination process. The purpose of this form is for the project sponsor to provide sufficient information to allow the Air Quality Conformity Task Force to determine if a project is considered a project of air quality concern and therefore requires a project-level PM<sub>2.5</sub> hot-spot analysis pursuant to Federal Conformity Regulations.

A project of air quality concern is defined in 40 CFR 93.123(b)(1) as follows:

- (i). New or expanded highway projects that have a significant number of or significant increase in diesel vehicles;
- (ii). Projects affecting intersections that are at Level-of-Service D, E, or F with a significant number of diesel vehicles, or those that will change to Level-of-Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project;
- (iii). New bus and rail terminals and transfer points than have a significant number of diesel vehicles congregating at a single location;
- (iv). Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location; and
- (v). Projects in or affecting locations, areas, or categories of sites which are identified in the PM<sub>10</sub> or PM<sub>2.5</sub> applicable implementation plan or implementation plan submission, as appropriate, as sites of violation or possible violation.

The form is not required under the following circumstances:

The project does not require a project-level PM hot spot analysis since it:

- Is exempt pursuant to 40 CFR 93.126; or
- Is a traffic signal synchronization project under 40 CFR 93.128; or
- Uses no Federal funds AND requires no Federal approval.

### **Instructions**

The project sponsor is responsible for taking the following actions:

1. Fill out this form in its entirety and ensure that there is a sufficient level of detail about the project for the Air Quality Conformity Task Force to make an informed decision on whether or not a project requires a project-level PM<sub>2.5</sub> hot-spot analysis.
2. Upload and submit this completed form to MTC via the FMS so that MTC can schedule this project for interagency consultation by the Air Quality Conformity Task Force. In addition to this form, the project sponsor may upload the PM<sub>2.5</sub> hot-spot analysis via FMS for review by the Conformity Task Force.
3. Ensure a representative is available to discuss the project at the Air Quality Conformity Task Force meeting if necessary.

<b>RTIP ID#</b> <i>(required)</i>				
<b>TIP ID#</b> <i>(required)</i>				
<b>Air Quality Conformity Task Force Consideration Date</b>				
<b>Project Description</b> <i>(clearly describe project)</i>				
<b>Type of Project:</b> <i>Pick one project type:</i> New State highway, Change to existing State highway, New regionally significant street, Change to existing regionally significant street, New interchange, Reconfigure existing interchange, Intersection Channelization, Intersection signalization, Roadway realignment, Bus, rail or intermodal facility/terminal/transfer point, Truck weight/inspection station				
<b>County</b>	<b>Narrative Location/Route &amp; Postmiles</b>  <b>Caltrans Projects – EA#</b>			
<b>Lead Agency:</b>				
<b>Federal Action for which Project-Level PM Conformity is Needed</b> <i>(check appropriate box)</i>				
Categorical Exclusion (NEPA)	EA or Draft EIS	FONSI or Final EIS	PS&E or Construction	Other
<b>Scheduled Date of Federal Action:</b>				
<b>NEPA Delegation – Project Type</b> <i>(check appropriate box)</i>				
Exempt	Section 6004 –Categorical Exemption		Section 6005 – Non- Categorical Exemption	
<b>Current Programming Dates</b> <i>(as appropriate)</i>				
	<u>PE/Environmental</u>	ENG	ROW	CON
Start				
End				

**Project Purpose and Need (Summary):** *(please be brief)*

**Surrounding Land Use/Traffic Generators** *(especially effect on diesel traffic)*

**Opening Year:** If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

**RTP Horizon Year / Design Year:** If facility is a highway or street, Build and No Build LOS, AADT, % and # trucks, truck AADT of proposed facility

**Opening Year: If facility is an interchange(s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

**RTP Horizon Year / Design Year: If facility is an interchange (s) or intersection(s), Build and No Build cross-street AADT, % and # trucks, truck AADT**

**Opening Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses**

**RTP Horizon Year / Design Year: If facility is a bus, rail or intermodal facility/terminal/transfer point, # of bus arrivals for Build and No Build, % and # of bus arrivals will be diesel buses**

**Describe potential traffic redistribution effects of congestion relief (*impact on other facilities*)**

**Comments/Explanation/Details (*please be brief*)**